

**GURU NANAK DEV ENGINEERING COLLEGE, LUDHIANA**

**Department of Electronics and Communication Engineering**

**Syllabus Scheme for B. Tech.–Electronics and Communication Engineering (Batch 2024 onwards)**

Semester-3 <sup>rd</sup>											
S. No.	Course Category	Course Code	Course Title	Subject Type	Hours per week			Marks Distribution		Total Marks	Credits
					L	T	P	CA	ESE		
1	Basic Science Course	BSEC101	Probability & Random Processes	Theory	3	1	0	40	60	100	4
2	Professional Core Course	CEC101	Electronic Devices and Circuits	Theory + Practical	3	1	2	90	60	150	5
3	Professional Core Course	CEC102	Signals and Systems	Theory + Practical	3	1	2	90	60	150	5
4	Professional Core Course	CEC103	Digital System Design	Theory + Practical	3	1	2	90	60	150	5
5	Humanities, Social Sciences and Management Course	HSMC103	Business Essentials for Engineers	Theory	2	0	0	40	60	100	2
6	Project work, Seminar and Internship	TREC101	Training-I	Practical	0	0	40	60	40	100	1
7	Project work, Seminar and Internship	SMEC101	Seminar & Technical Report Writing for Engineers	Practical	0	0	2	50	0	50	1
8	Mandatory Course (Non-Credit)	MC101	Indian Constitution	Theory	2	0	0	50	0	50	S/US
<b>TOTAL</b>					<b>16</b>	<b>4</b>	<b>48</b>	<b>510</b>	<b>340</b>	<b>850</b>	<b>23</b>

**Contact Hours 68**

For MCEC101 (Non-Credit Course), the minimum criteria for passing is to secure at least 40% of maximum marks assigned to Continuous Assessment (CA) and attain satisfactory level (S).

Training-I (TREC101) evaluates Institutional Training of 120 hours undertaken by students at the end of 2nd Semester with 60 hours at department and other 60 hours for self-learning; training duration of 3 weeks.

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Syllabus Scheme for B. Tech.–Electronics and Communication Engineering (Batch 2024 onwards)

Semester-4 <sup>th</sup>											
S. No.	Course Category	Course Code	Course Title	Subject Type	Hours per week			Marks Distribution		Total Marks	Credits
					L	T	P	CA	ESE		
1	Professional Core Course	CEC104	Analog Electronics	Theory + Practical	3	0	2	90	60	150	4
2	Professional Core Course	CEC105	Control Systems	Theory	3	1	0	40	60	100	4
3	Professional Core Course	CEC106	Network Theory	Theory	3	1	0	40	60	100	4
4	Professional Core Course	CEC107	VLSI design withVHDL	Theory + Practical	3	0	2	90	60	150	4
5	Professional Core Course	CEC108	Computer Networks	Theory + Practical	2	0	2	90	60	150	3
6	Engineering Science course	ESEC101	Object Oriented Programming and Data Structures	Theory + Practical	3	0	2	90	60	150	4
7	Mandatory Course(Non-Credit)	MCEC101	Environmental Science & Sustainability	Theory	2	0	0	50	0	50	S/US
8	Humanities, Social Sciences and Management Course	HSMC104	Universal Human Values: Understanding Harmony	Theory	2	0	0	40	60	100	2
9	Mentoring and Professional Development	MPD102	Mentoring and Professional Development	Practical	0	0	1	100	-	100	1
<b>TOTAL</b>					<b>21</b>	<b>2</b>	<b>9</b>	<b>580</b>	<b>420</b>	<b>1050</b>	<b>26</b>

**Contact Hours 32**

For MCEC101 (Non-Credit Course), the minimum criteria for passing is to secure at least 40% of maximum marks assigned to Continuous Assessment (CA) and attain satisfactory level (S).

For MPD102, there is one period per week in both semesters of 2nd year; final evaluation of this course will be done based on the combined assessment of odd and even semester of respective year of study.